For Research Use Only

CoraLite® Plus 488-conjugated PPARA Monoclonal antibody



Catalog Number: CL488-66826

Basic Information

Catalog Number: GenBank Accession Number:

CL488-66826 BC000052 GeneID (NCBI):

100ul , Concentration: 1000 $\mu g/ml$ by 5465 Nanodrop:

UNIPROT ID: Q07869 Mouse Full Name:

Isotype: peroxisome proliferator-activated

lgG1 receptor alpha Immunogen Catalog Number: Calculated MW: AG7896 52 kDa

> Observed MW: 53 kDa

Purification Method:

Protein G purification

CloneNo.: 1G1E10

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

Species Specificity:

human, rat

Background Information

Peroxisome proliferator-activated receptor alpha (PPARA) is a ligand-activated transcription factor that belongs to the PPAR nuclear receptor superfamily. PPARA is essential in the modulation of lipid transport and metabolism, mainly through activating mitochondrial and peroxisomal fatty acid β-oxidation pathways. In addition, PPARA seems to decrease inflammation mainly through direct interaction with NF-kB, causing inhibition of its signaling pathway or reducing the activated levels of NF-кB and subsequent inflammation. Furthermore, PPARA was implicated in the attenuation of oxidative stress in alcoholic liver disease when treated with polyenephosphatidylcholine through downregulation of ROS-generating enzymes such as ethanol-inducible cytochrome P450 2E1 (CYP2E1), acyl-CoA oxidase, and NADPH oxidase. PPARA exists two isoforms and molecular weight of PPARA isoforms are 52 kDa and 22 kDa. The ability of a retinoid X receptor (RXR) to heterodimerize with many nuclear receptors, including LXR, PPAR, NGF1B and RAR, underscores its pivotal role within the nuclear receptor superfamily. Among these heterodimers, PPAR:RXR is considered an important signalling mediator of both PPAR ligands, such as fatty acids, and 9-cis retinoic acid (9-cis RA), an RXR ligand. (PMID: 15103326). PPARA can form Heterodimer with RXRA and molecular weight of Heterodimer is about 110 kDa.

Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data